patients of perioperative management undergoing with coronary artery stents cardiac surgery non

Nabil Abd El azem Mohamed Emara

In the last 20 years, there have been important developments in the field of percutaneous coronary intervention (PCI), initially with balloon angioplasty alone -and now in combination with coronary stent insertion. In patients scheduled for noncardiac surgery the risk of MI is increased in the perioperative period, so, the heart should be protected either by drugs like beta blockers (atenolol, bisoprolol) and statins or by preoperative cardiac intervention which may be CABG or PCI alone or with stent insertion. Coronary artery stents are of two types; Bare Metal Stents (BMS) and Drug Eluting Stents (DES) in which the stent have active coat and it's of two types Sirolimus eluting and Paclitaxel eluting stent. Both types of coronary stents require administration of antiplatelet drugs. Antiplatelet agents (platelet inhibitors) are drugs capable of inhibiting platelet function, in particular platelet activation and aggregation. Currently available antiplatelet agents include aspirin, dipyridamole, the thienopyridines (ticlopidine and clopidogrel) and the glycoprotein IIb/IIIa (IIbß3) receptor antagonists. The insertion of coronary stents carries the risk of stent restenosis, thrombosis or occlusion, myocardial infarction, up to death. The management of patients with coronary stents undergoing non-cardiac surgery is a dilemma. This comes from the use of antiplatelt therapy that affects the function of the platelets. There are some tests done for platelets and coagulation; the standard tests PT and APTT but there are new tests for platelet function preoperatively like TEG, platelet work analyzer and ultegra rapid platelet function assay. In the perioperative period it carries the risk of thrombosis on stoppage or discontinuation of antiplatelet therapy also carries the risk of bleeding on continuation of antiplatelet therapy.